

Listing of Claims:

1. (currently amended) A method of controlling communication resources in a transmission from a first network element to a second network element across a network, where the communication resources are allocated by a controller in the network, comprising:

monitoring the length of data queue in the first network element as an indication of future need of communication resources in said first network element;

sending the indication from the first network element to the controller;
and

controlling the communication resources between the first network element and the second network element based on this indication, and

wherein the controller is separate and independent from the first network element ~~and the second network element.~~

2. (original) The method according to claim 1, wherein the first network element is connected to the controller by way of the second network element.

3. (original) The method according to claim 1, wherein the indication includes information about a transmit buffer of the first network element.

4. (original) The method according to claim 1, wherein the indication includes information on the additional resources needed for said first network element.

5. (currently amended) A method of controlling communication resources in a transmission from a first network element to a second network element across a network, where the communication resources are allocated by a controller in the network, comprising:

_____ monitoring an indication of future need of communication resources in said first network element;

_____ sending the indication from the first network element to the controller;
and

_____ controlling the communication resources between the first network element and the second network element based on this indication, and

_____ wherein the controller is separate and independent from the first network element,

_____ wherein the indication includes information about a transmit buffer of the first network element. The method according to claim 3, wherein the indication includes values corresponding to predefined resources.

6. (original) The method according to claim 4, wherein the indication includes information about a transmit buffer of the first network element.

7. (original) A method according to claim 1, wherein the first network element is a mobile station and the second network element is a base station of a wireless communication network.

8. (currently amended) A system for controlling communication resources in a network, comprising:

a plurality of first stations;

a second station connected to said plurality of first stations through a plurality of communication links;

a controller for controlling the allocation of said communication resources among said links, the controller being separate and independent from the first stations ~~and the second station~~;

said allocation being performed in accordance with information transmitted from said first stations which indicates a need for communication resources based on the lengths of data queues in the first stations.

9. (previously presented) The system according to claim 8, wherein said controller is part of said second station.

10. (original) The system according to claim 8, wherein said first stations are mobile stations in a wireless network.

11. (currently amended) The system according to claim 8, wherein each of said plurality of first stations includes:

a data generator;

~~a data queue coupled to the data queue;~~
an encoder for generating a code representative of the length of the
data queue;
a transmitter for transmitting said data with said code included therein
as a field.

12. (previously presented) The system according to claim 8, wherein said
second station includes a receiver for receiving a transmission and producing data;
a decoder for decoding a field of said data and producing an indication
of the data queue in an associated first station;
wherein said controller receives said information from said decoder and
allocates communication resources in accordance therewith.

13. (original) The system according to claim 8, wherein said indication is
provided for each data block transmitted.